U.S. Air Force

Why we need an AIR FORCE

By CHARLES M. WESTENHOFF

In the summer of 1917 Britain was under siege. German submarines had been causing havoc on the seas for three years, but a direct terror struck as Gotha bombers attacked London. The government immediately appointed a committee to study this threat. On August 17, 1917 the committee unequivocally recommended creating an independent air force. In proposing what became the Royal Air Force (RAF), the committee relied on reason, not precedent. Because the origins of the first armies and navies are not similarly documented, the RAF provides a case study of the establishment of a new branch of the military. Any explanation of why the United States needs an air force can be illuminated by surveying the history of warfare since 1914, starting with the way in which a group of army and naval officers brought an independent air force into being.

On the Basis of Reason

Britain created the world's first independent air force as a response to air raids on its cities during World War I.[1] Prime Minister Lloyd George formed a "Committee on Air Organization and Home Defence Against Air Raids" and staffed it with army and naval officers in order to turn the problem over to

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military experts. The committee, under Field Marshal Jan Christian Smuts, recounted the "acute controversies" between separate army and naval air arms over how military airpower should be organized. It noted that existing air services, the Royal Flying Corps of the army and the Royal Navy Air Service, were used like artillery—to accomplish tasks assigned by their respective services. These organizations were not capable of establishing policy or planning and conducting major air operations since they lacked expertise, means, and especially authority.[2] The requirement to form an autonomous air force, however, was clear to the committee:

ultimately the foremost reason for establishing an air force was national survival

> *Essentially the position of an air service is quite different from that of the artillery arm, to pursue our comparison; artillery could never be used in war except as a weapon in military or naval or air operations. It is a weapon, an instrument ancillary to a service, but could not be an independent service itself. Air Service, on the contrary, can be used as an independent means of war operations. . . . Unlike artillery, an air fleet can conduct extensive operations far from, and independently of, both Army and Navy.*[3]

The soldiers and sailors who comprised the Smuts committee focused on the needs of the country rather than the demands of their services. The committee realized that both services were fully competent in their respective fields, but neither was "specially competent" to devise and direct the independent air operations Britain planned for 1918.[4] In recommending creation of a separate air force, these officers ensured that strong air support would be available to both the army and the navy. Their expressed reasoning was farsighted, objective, and comprehensive.

Strategic perils on the near horizon were their first consideration. The committee reasoned that a national air force was needed to fully develop the new technology, organize forces to make the most of that technology, and employ those forces to make the greatest possible contribution to the war. Their deliberate focus on the implements of air warfare was timely and crucial, since all the belligerents were approaching a point of exhaustion and beginning to see the military *revolution* at hand: "Manpower in its war use will more and more tend to become subsidiary and auxiliary to . . . mechanical power."[5]

Organization was another consideration. The committee made eight recommendations in its report to the Prime Minister. The first was to create a ministry for air, a cabinet department equal in status to those of the army and navy. The second was to form an air staff "equipped with the best brains and practical experience available."[6] An air department was the first step in building a national air force; manning the service with air professionals was necessary to make it function.

Effectiveness and efficiency were the third consideration. The report surveyed the field of possibilities for organizing an air force and discarded each option that could have the effect of reducing national air strength and effectiveness. In sum, the committee determined that an air force was essential. The officers who made these recommendations explicitly considered putting them off until after the war but determined that failing to create an air force was a risk.[7] Ultimately the foremost reason for establishing an air force, without precedent or evidence of modern airpower capabilities, was national survival.

On the Basis of Evidence

When Congress passed the National Security Act of 1947 it had ample evidence to justify an air force, and nuclear deterrence was only the latest.[8] In the theaters of World War II, airpower had proved necessary and sometimes sufficient to achieve major war aims. The campaigns in the Southwest Pacific provide excellent examples of joint air operations. General Douglas MacArthur described Japan's first major defeat in the theater in these words:

> *The outstanding military lesson of this campaign was the continuous calculated application of air power, inherent in the potentialities of the Air Force, employed in the most intimate tactical and logistical union with ground troops.*[9]

Across the globe at the same time, American air forces in Britain were attacking German war industries while others in the Mediterranean wrested control of the air from

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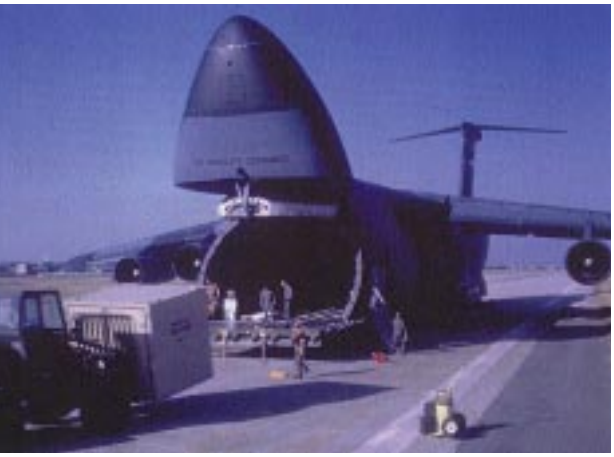
the *Luftwaffe*, shielded surface forces from air attack, supported a series of amphibious campaigns, and bombed Axis oil supplies. As soon as Sicily was in Allied hands, the Mediterranean air effort was focused on Italy to prepare for amphibious landings at Salerno and Messina. After six days of concentrated bombing, Mussolini was overthrown and the Italian government sued for peace. Ground forces continued to fight a terrible campaign in Italy in an intimate union with air forces, but only German occupation forces opposed them.[10]

the need for a separate air force was clearest at theater-level

Two Axis belligerents of World War II—Italy and Japan—surrendered after Allied forces occupied their outlying territories, but before assaults on their central homelands began. This can be attributed to a fear of airpower or invasion. More precisely, these factors are inseparable since mastery of the air was a prerequisite for amphibious operations. As General Dwight Eisenhower remarked to his son after Normandy, "If I didn't have air supremacy, I wouldn't be here." [11]

Before the campaign for Northwest Europe could begin, Allied air forces gained control of the air over the theater, attacked key industries, and prevented the German forces from reinforcing Normandy after D-Day. As Allied forces advanced, the U.S. 9th Air Force operated primarily in support of ground forces while the 8th Air Force worked primarily far beyond the lines, creating long-term advantages. But it would be a mistake to draw a sharp distinction between the missions of tactical and strategic air forces; all available forces worked together repeatedly, as overall needs required.[12]



Combat Camera Imagery (Andy Dunaway)

C–5 Galaxy at San Vito Air Station for Deny Flight.

Allied air forces secured the air over every theater save one. On the Eastern Front, neither Russia nor Germany succeeded in using air forces to gain lasting ascendancy over its opponents. Both used their air resources primarily in a combined-arms fashion, to support ground operations. By contrast, the American and British forces centralized control of air assets at the theater level, alternated between independent and supporting missions as needed, and created higher opportunities for the overall campaign.[13] The tactical and operational competence demonstrated by Soviet and German air forces in supporting their ground arms could not make up for strategic shortfalls in air planning. It would be futile to try to explain what might have happened if either side had employed its forces using a higher-level construct of joint operations, but it is significant that the Eastern Front was by far the bloodiest in World War II.[14]

A U.S. Air Force

Thinking about a postwar air force began seriously in 1943, when then Major General Thomas T. Handy of the General Staff wrote a planning paper on future defense needs. He pointed out the requirement for "a complete correlation of national policy with military policy and the political ends to be sought with the military means to achieve them." General George C. Marshall, the Army Chief of Staff, endorsed the paper and made this marginal note: "I think maintenance of sizable ground expeditionary force probably impracticable. Having airpower will be the quickest remedy." [15]

Handy and Marshall focused on future policy needs, and then Vice President-elect Harry S. Truman wrote presciently in 1944:

> *Our standing air force will undoubtedly remain larger than ever before in peacetime. We will need an active air force to carry out the policing missions that will be required of us by the forthcoming United Nations agreement to put out aggressor fires while they are still small. This air force will be more alert and experimental than ever before—it will keep up with the latest developments, and will create developments of its own. It will be in a constant stand-by condition, a powerful deterrent to any fleet of long-range bombers or salvos of super-robot bombs capable of long flight and pinpoint aim.*[16]

Note that Truman had no knowledge of nuclear weapons at this time; he foresaw that the future air force would be a "powerful deterrent" in itself.[17] Fulfilling this role required that this air force be ready and responsive.[18] The need for a separate air force was clearest to commanders at theater-level

who saw most directly the benefits of employing such forces both in coordinated joint operations and in areas where other forces were absent. Eisenhower was so convinced of the need for a separate air force ("No sane officer of any arm would contest that thinking") that he conveyed this conviction to a meeting of the Army Staff in December 1945, saying:

the Air Commander and his staff are an organization coordinate with and coequal to the land forces and the Navy. I realize there can be other individual opinions. . . . But that seems to be so logical from all of our experiences in this war—such an inescapable conclusion—that I for one can't entertain any longer any doubt as to its wisdom.[19]

The National Security Act of 1947 formalized the responsibilities assigned to the Air Force, but did not create a monopoly on operating air forces. Rather, it stipulated that the United States would rely on the Air Force to develop and apply airpower. No other service is so charged. With this mandate Congress established symmetry among services, fixing responsibility for developing and maintaining specialized military competence in the ground, sea, and air media.

Creating the Department of the Air Force and a service within it ensured that there would be a military arm responsible for nurturing the potential of aviation, developing air capabilities to serve national needs, formulating and executing air policy and strategy, and fostering special competence and expertise unique to conducting military operations in the air environment. Since the Air Force was founded, the Nation has relied on it for deterrence, combat, and early crisis response as well as strategic, operational, and tactical leverage—and as a way to achieve national policy aims in joint and combined operations, as it surely did in 1991.[20]

The Gulf War

The accomplishments of all the services in Desert Storm have been seriously undervalued. The Iraqi military had more combat experience employing modern weapons—including precision guided munitions, night vision devices, recent generation artillery and rockets, cluster bombs, laser designation, and electronic warfare—than the coalition nations which it faced. Iraq had spent and borrowed tens of billions of dollars equipping its forces in its war against Iran with the goal of using technology and firepower to minimize casualties. Some of its soldiers and airmen had as many as eight years combat experience. Iraq was a formidable regional power and well aware of it.[21] These facts are too often overlooked in the light of the swift collapse of Iraqi forces.

Allied operations could have begun with an air effort, frontal assault, flanking attack of any size, airborne operation, amphibious assault, or combination of these measures. Trevor N. Dupuy analyzed all these possibilities, projected casualties, and concluded, "the proper solution is to begin the war with the air campaign [to minimize casualties]. . . . If this should result in an Iraqi surrender, so much the better."[22]

Desert Storm was not solely an Air Force triumph; it was a modern warfare success in which air forces played a bigger part than in earlier wars. It relied on specialized competence in all media of warfare, on excellence in weaponry, tactics, logistics, operational art, and strategy. No amount of superiority in one field could have overcome deficiencies in others, except at great cost. It demonstrated that the Armed Forces of the United States, when employed synergistically, are exceedingly difficult to defend against. Command at the component level leveraged each arm within a joint construct that ensured mutual support and created synergy.

The air component rapidly gained command of the air, devastated Iraqi command and control, destroyed key strategic targets (including electrical power generation and transportation), isolated the battlefield, and destroyed about half of Iraq's firepower in Kuwait—all before the allied ground offensive began. But how did having the major share of this airpower organized, trained, and equipped by the Air Force make a difference? Eliot Cohen has pointed out that Air Force dominance in planning air operations against Iraq ensured coherence of the allied plan:

American defense planners should look at what happened and ask whether these improvisations do not point the way to greater effectiveness. After several decades of insisting that "service" means "parochial," military reformers might ponder the individual merits of the services, each of which can pool a great deal of operational expertise along with a common world view and an esprit de corps difficult to find among a melange of officers.[23]

Had Gulf War operations been guided by a doctrine calling for simultaneous employment of all forces, or had air operations been driven solely by surface force support requirements, allied forces would have suffered far more casualties. The Air Force ensures that there are always professionals within the Armed Forces thinking about how airpower can best serve joint forces and the Nation.

In conventional conflicts since World War II air forces have set the conditions for joint operations, establishing advantages and opportunities for all components. As Admiral William F. Halsey told Congress after World War II: "The lesson from the last war that stands out clearly above all the others is that if you want to go anywhere in modern war, in the air, on the sea, on the land, you must have command of the air."[24] This is no less true today, although space supremacy and informational dominance have become necessary accompaniments to air supremacy.

Many of the reasons for creating an air force have not changed significantly since the Smuts committee issued its report in 1917. First and foremost, an air force exists to develop and maintain special capacities to promote and defend national interests (as the other services do, each in a distinct way). Though air attack on the United States seems a remote possibility,[25] the Nation must have an air force capable of helping its friends and allies protect their people and forces from hostile attacks. The big picture mission of the Air Force, to control and exploit air and space, has two dimensions. In the foreground, *controlling* includes everything needed to control air or space. In the background, *exploiting* includes tasks that are best done in air or space and those that confer special advantages when conducted by air or space forces. Planners continue to devise means to exploit air and space and tasks that are best performed by air forces. Post World War II examples include space missions, global airlift, air refueling, and wide-area surveillance. Also, new ways of accomplishing existing missions keep evolving.

Increased speed, reliability, and responsiveness have fortified the *presence* of air forces, if relatively. The ability to conduct independent missions in areas where ground and naval forces cannot reach or are not present remains a primary military advantage of an air force. To cover the logical field of possibilities noted by Smuts, an air force can support efforts on land and at sea, operate where ground and naval forces cannot, and undertake various operations that can feasibly be performed only from the air. Similarly the Army and Navy have unique operating capacities for which the Air Force cannot substitute.

The complexities of air operations still stem from operating in three dimensions with no option to stop moving, from operating above the apparent horizon with nowhere to hide but the immensity of airspace or the interstices of the terrain, and from the interdependence of air and space units. However, the complexity of air and space systems today was undreamt of decades ago. It takes a decade or more to master a modern aircraft—aircrews and system maintainers never stop learning. Preparation to plan and conduct air operations is a lifetime commitment, just like the mastery of ground and naval warfare.

The current place of the Air Force in conventional warfighting and Operations Other Than War would not have surprised the Smuts committee, which observed that "as far as can at present be foreseen there is absolutely no limit to the scale of [airpower's] future independent war use."[26] What might surprise those prescient soldiers and sailors? Perhaps the ease of operating coalition air forces together in a common purpose. Possibly the global preeminence the U.S. Air Force enjoys, largely as a result of investing in technology which maximizes mission reliability and minimizes lives at risk.[27] Probably not the interplay of air capabilities and national security policies. The one outcome that might surprise the army and naval officers on the Smuts committee today is the power of their foresight. JFQ

NOTES

[1] Germany operated separate army and naval air arms throughout World War I, a fact it later lamented. See James M. Spaight, "The Coming of Organized Air Power," excerpted in Eugene M. Emme, *The Impact of Air Power* (Princeton: D. Van Nostrand, 1959), pp. 41–44.

[2] The Smuts committee, noting that British aircraft production in 1918 would exceed army and navy support requirements, wrote: "In settling in advance the types [of aircraft] to be built, the operations for which they are intended apart from naval or military use should be clearly kept in view. This means the Air Board has already reached the stage where the settlement of future war policy in the air war has become necessary. Otherwise engines and machines useless for independent strategical operations may be built." H.A. Jones, *The War in the Air: Being the Story of the Part Played in the Great War by the Royal Air Force*, appendix II (Oxford: Clarendon Press, 1937), pp. 10–11.

[3] Ibid., p. 10.

[4] Ibid., p. 10.

[5] Ibid., p. 11.

[6] Ibid., p. 12.

[7] Field Marshall Sir Douglas Haig took exception to the Smuts committee in a letter to the Chief of the Imperial General Staff dated September 15, 1917. While some objections may appear to be sophistry, Haig allowed that the military potential of air forces could best be determined by those with relevant practical knowledge, and that their optimism was a matter of "urgent importance." Letter reproduced in *Air Power Historian*, vol. 3, no. 3 (July 1956), pp. 153–57.

[8] Robert Frank Futrell, *Ideas, Concepts, Doctrine: Basic Thinking in the United States Air Force*, vol. 1, *1907–1960* (Maxwell Air Force Base, Ala.: Air University Press, 1989), passim; Herman S. Wolk, *Planning and Organizing the Postwar Air Force, 1943–1947* (Washington: Office of Air Force History, 1984).

[9] Supreme Commander for the Allied Powers, *Reports of General MacArthur*, vol. 1, *The Campaigns of MacArthur in the Pacific* (Washington: Government Printing Office, 1966), p. 98.

[10] See, for example, Peter F. Herrly and Lillian A. Pfluke, "Southern Italy: Strategic Confusion, Operational Frustration," *Joint Force Quarterly*, no. 4 (Spring 1994), pp. 70–75.

[11] Quoted in Richard P. Hallion, *D-Day 1944: Air Power Over the Normandy Beaches and Beyond* (Washington: Air Force History and Museums Program, 1994), p. 44.

[12] Kent Roberts Greenfield, *The Historian and the Army* (Port Washington, N.Y.: Kennikat Press, 1954), pp. 84–85. Greenfield thought the greatest Army Air Force contributions to the ground campaign were operations commanded at the component level. Omar N. Bradley et al., *Effect of Air Power on Military Operations, Western Europe* (Wiesbaden, Germany: 12th Army Group, July 15, 1945) provides a more mixed assessment.

[13] David MacIsaac, "Voices from the Central Blue: The Air Power Theorists," in Peter Paret et al., editors, *Makers of Modern Strategy: From Machiavelli to the Nuclear Age* (Princeton: Princeton University Press, 1986), pp. 637–38.

[14] Soviet casualties alone probably approached 25 million. Trevor N. Dupuy et al., editors, *International Military and Defense Encyclopedia* (Washington: Brassey's, 1993), p. 2957.

[15] Futrell, *Ideas, Concepts, Doctrine*, p. 201; Wolk, *Planning and Organizing the Postwar Air Force*, p. 48.

[16] Harry S. Truman, "This Administration's Air Policy," *Flying*, vol. 35, no. 6 (December 1944), pp. 157–58.

[17] Paul H. Nitze discussed the suitability, value, and even superiority of conventional forces as a centerpiece of deterrence in "A Conventional Approach," *U.S. Naval Institute Proceedings*, vol. 120, no. 5 (May 1994), pp. 46–50.

[18] General Harry H. ("Hap") Arnold, Commanding General of the Army Air Forces, served throughout the war as a member of the Joint Chiefs and had an Air Staff, with Army Air Forces operating as one of three autonomous Army commands along with Army Ground Forces and Army Service Forces. Neither the ground nor the service forces commanders were JCS members. This confusing command arrangement combined with shortfalls in Army Air Force support created unacceptable constraints on one of airpower's key strategic attributes, responsiveness. Wolk, *Planning and Organizing the Postwar Air Force*, pp. 23, 27–29, 48, 74.

[19] Ibid., p. 97.

[20] It is not possible to recapitulate airpower history since World War II. But rather than dodging Vietnam, accept this summary of Momyer, Summers, Krepinevich, Clodfelter, and Tilford: relying on firepower or airpower is not a satisfactory substitute for strategy. There are many lessons from Vietnam, but none so vital as the need for sound and clear strategic thinking. This, at least as much as the excellence of the services, paid off in Desert Storm.

[21] See, for example, Anthony H. Cordesman, *The Iran-Iraq War and Western Security, 1984–1987* (New York: Jane's, 1987). Anthony H. Cordesman and Abraham R. Wagner provide a more complete, updated appraisal in *The Lessons of Modern War*, vol. 2, *The Iran-Iraq War* (Boulder, Colo.: Westview Press, 1990), but typographical errors make this a frustrating account to read.

[22] Trevor N. Dupuy, testifying before the House Armed Services Committee, December 13, 1990, recapitulated in *If War Comes: How to Defeat Saddam Hussein* (McLean, Va.: HERO Books, 1991), pp. 100–01.

[23] Eliot Cohen, "The Mystique of U.S. Air Power," *Foreign Affairs*, vol. 73, no. 1 (January/February 1994), p. 118.

[24] Quoted in House Armed Services Committee report of October 1949 hearings in Emme, *The Impact of Air Power*, p. 639.

[25] Something we take for granted because of the rapid retaliatory capability of the Armed Forces. This is a tremendous bargain compared to maintaining a leakproof defense.

[26] Jones, *The War in the Air*, p. 10.

[27] See, for example, William J. Perry, "Defense Aerospace and the New World Order," in *The Future of Aerospace* (Washington: National Academy Press, 1993), pp. 7–14.